IN THE CLAIMS:

Please amend Claims 17, 18, 21-25, 27, 28 and 30, to read as follows.

1-16. (Canceled)

17. (Currently Amended) An apparatus comprising:

a mirror having a reflection surface that reflects light;

a heat-radiation plate arranged ~~opposite~~ facing and spaced away from said reflection surface of said mirror and arranged outside a passage area for ~~the~~ light to be incident on and reflected from said reflection surface; and

a ~~cooling mechanism~~ cooler configured to cool said heat-radiation plate.

18. (Currently Amended) An apparatus according to claim 17, further comprising a thermometer configured to detect ~~the~~ a temperature of said mirror, wherein said ~~cooling mechanism~~ cooler is configured to cool said heat-radiation plate based on the detection obtained by said thermometer.

19. (Previously Presented) An apparatus according to claim 17, wherein said heat-radiation plate is separated and arranged at plural positions so as to comprise separated plural heat-radiation plates.

20. (Previously Presented) An apparatus according to claim 19, wherein the passage area is arranged between said separated plural heat-radiation plates.

21. (Currently Amended) An apparatus according to claim 19, wherein one of said separated plural heat-radiation plates is arranged ~~opposite~~ facing said reflection surface of said mirror, and another of said separated plural heat-radiation plates is arranged ~~opposite~~ facing an outer surface, of said mirror, said outer surface being different from said reflection surface.

22. (Currently Amended) An apparatus according to claim 17, wherein said heat-radiation plate has a form corresponding to ~~the~~ a form of said reflection surface of said mirror.

23. (Currently Amended) An apparatus according to claim 19, wherein said ~~cooling mechanism~~ cooler is configured to cool said separated plural heat-radiation plates individually.

24. (Currently Amended) An apparatus according to claim 17, wherein said ~~cooling mechanism~~ cooler is configured to cool said heat-radiation plate by circulating coolant.

25. (Currently Amended) An apparatus according to claim 24, wherein said ~~cooling mechanism~~ cooler includes:

a first thermometer configured to measure the temperature of said mirror;

a second thermometer configured to measure ~~the~~ temperature of the coolant; and

a controller configured to estimate ~~the~~ an amount of the light incident on said mirror to obtain an estimated amount of the light and to control ~~the~~ temperature of the coolant based on ~~the~~ measurement obtained by said first thermometer and said second thermometer and the estimated amount of the light.

26. (Previously Presented) An apparatus according to claim 25, wherein said first thermometer is a radiation thermometer arranged away from said mirror.

27. (Currently Amended) An apparatus according to claim 17, wherein said ~~cooling mechanism~~ cooler includes:

a solid heat-transfer element attached to said heat-radiation plate and configured to transfer heat from said heat-radiation plate; and

a ~~circulation mechanism~~ circulator configured to circulate coolant so as to cool said solid heat-transfer element.

28. (Currently Amended) An apparatus according to claim [[12]] 17, further comprising:

a mirror barrel ~~that accommodates~~ configured to accommodate said mirror;

a mirror support[[,]] fixed to said mirror barrel~~, that holds~~ and configured to support said mirror in said mirror barrel; and

a heat-radiation plate support[[,]] fixed to said mirror barrel~~, that holds~~ and configured to support said heat-radiation plate in said mirror barrel.

29. (Previously Presented ) An exposure apparatus for exposing a substrate to light via a reticle, said apparatus comprising:

an apparatus as defined in claim 17, wherein said mirror is configured and positioned to guide the light to the substrate.

30. (Currently Amended) An exposure apparatus according to claim 29, wherein said apparatus as defined in claim 17 ~~comprises~~ is a constituent element of one of a light source apparatus configured to generate the light, an illumination apparatus configured to guide the light from a light source to the reticle, and a projection apparatus configured to project the light from the reticle to the substrate.

31. (Previously Presented) A method of fabricating a device, said method comprising steps of:

exposing a substrate to light via a reticle using an exposure apparatus as defined in claim 29;

developing the exposed substrate; and

processing the developed substrate to fabricate the device.